



Troubleshooting Guide

Use the **F1** button on any page of a ThinManager wizard to launch Help for that page.

Visit www.thinmanager.com/technotes/ to download the manual, manual chapters, or the ThinManual.

This is a list of common configuration errors and a guide for fixing them.

Note: When any problem arises, check Downloads at www.thinmanager.com for the latest service pack or firmware. The problem you are experiencing may have already been fixed and released in a recent version and using the latest version will cure the current problem. Try applying the latest firmware, and then reboot the thin client to see if the problem still exists. The current version is backwards compatible to earlier versions of ThinManager.

From Power on to Terminal Server Login

1) Powering on the Thin Client

A) No Power

- Check power cable, power supply, and power outlets.

B) No Video

- Check video cable and monitor.

Warning: Never go into the thin client BIOS and change the *Integrated Peripherals>Display Status* from CRT to LCD. This will change the video output of the motherboard from the VGA port to a socket on the motherboard used for integrated LCD panels. Changing this from CRT will prevent any video from being displayed on a monitor.

2) Booting - ACP Network Boot Loader

A) Cannot get IP address using DHCP

- Is the ThinManager Ready thin client set to DHCP? They are set to DHCP by default, but can be changed.
- Is the Thin Client on the same side of the router as the DHCP server?
- Does the DHCP server have addresses to give out?

B) Cannot get IP address using Static IP menu

- Certain models like PXE boot ThinManager Compatible thin clients cannot use static IP.
- Static IP hasn't been set. Use the spacebar when the "**Select any Key to Configure IP Settings**" is displayed and set the client IP address

C) A Non-ThinManager Ready (PXE) Client Will Not Boot.

- PXE-E32: TFTP open timeout
 - Using a standard DHCP server with boot options: verify option 67 is set to **acpboot.bin**
 - Check that **acpboot.bin** is located in the ThinManager installation directory
 - Verify that there is not a firewall preventing the client from downloading the boot file



- PXE-E51: No DHCP or proxyDHCP offers were received
 - Not using a standard DHCP server: check that there is not a firewall preventing the client to connect
 - Make sure the client has a connection to the network with where the DHCP server resides
- PXE-E52: proxyDHCP offers were received. No DHCP offers were received.
 - Verify that the standard DHCP server is functioning correctly
 - Configure the ThinManager PXE Server to not use a standard DHCP server.
- PXE-E53: No boot filename received.
 - Using a relay agent: verify that the relay agent is configured properly
 - Using a standard DHCP server with boot options: verify that option 67 is set to acpboot.bin
- PXE-E55: ProxyDHCP service did not reply to request on port 4011
 - Install the latest service pack for your version of ThinManager
- PXE-E61: Media test failure, check cable
 - Make sure the client has a physical connection to the network

3) Cannot Load Firmware

A) Is Thin Client connecting to ThinManager Server?

i) Using DHCP

- Has Option 066 been set to the ThinManager Server IP Address?
- Is there a link light on the network port?
- Check router address, IP Addresses, and Subnet Mask

ii) Using Static IP

- Has the ThinManager Server IP Address been entered in the IP Configuration Menu?
- Check router address, IP Addresses, and Subnet Mask

B) Is the network blocked?

ThinManager Ready thin client that communicate through routers, gateways, or firewalls may need some ports opened to allow data flow through these devices. If the thin client communicates through one of these and it is having trouble, check to see if these ports are allowed.

The required ports are:

- **UDP/4900** - TFTP - Used for the TFTP download of the firmware.
- **TCP/2031** - Configuration - Used to pass the configuration from the ThinManager Server to the thin client.
- **TCP/2032** – ThinServer Proxy Service – used by iPad and iPhone apps.
- **UDP/67** – IP Address Assignment – Used by the PXE Server (if using PXE boot).
- **UDP/69** – TFTP – Used by the PXE Server (if using PXE boot).
- **TCP/1494** - Citrix - Used by the ICA protocol (if using ICA instead of RDP).
- **TCP/3389** - RDP - Used by the RDP protocol (if using RDP in v2.4.1 or later).
- **TCP/5900** - Shadowing - Used to shadow terminals. This can be changed on the Shadow Configuration page of the ThinManager Server Configuration Wizard.
- **UDP/1758** – Used if the default Multicast is used. If the network MTU size is not the default then the packet size needs changed on the Multicast Configuration page of the ThinManager Server Configuration Wizard.



- ICMP Echo Packets (Ping) – Used by WinTMC and Enforce Primary.
- DHCP - This needs configured, as needed.

C) Loads firmware intermittently/slowly

- Check for IP conflicts
- Check cable connections
- Make sure ThinManager Server CPU usage is below 100%

4) Thin Client Loads Firmware but fails to load configuration

A) "Please Define on Server"

- Enter ThinManager and define the terminal.

B) "License Not Available"

- Check your license usage in ThinManager. You are out of an ACP-supplied License.
- The Installation ID may come from the motherboard serial number, the MAC address on the network cards, or the GUID from the operation system. Don't change or disable the network cards after licensing to prevent changing the Installation ID, which can affect the validity of the license.

C) "This Terminal Disabled"

- A ThinManager administrator has disabled this terminal. Re-enable it.

D) "Network Error - Check Network Connections"

- Check the network cable, link light, and network.

E) Was Disabled, but did not go on when re-enabled.

- Reboot the thin client.

F) Is WinTMC Loaded on ThinManager Server?

- Make sure that the WinTMC client is not installed on the ThinManager Server. The WinTMC client will try to open the 2031 port that ThinManager needs to communicate with thin clients, causing a port conflict. WinTMC is for PCs, not servers. Uninstall the WinTMC client if it is present.

G) Terminal Selection menu is shown, but keyboard does not work

- Check keyboard and reboot
- Use PS/2 splitter if the unit has only one PS/2 port
- Switch the mouse and the keyboard if plugged into a PS/2 splitter.

5) Graphical ACP Logo is shown, but boot process stops

A) Does not attempt to connect to the terminal server

- Check Terminal Configuration Wizard to make sure a terminal server is specified

B) Cannot Connect to Server xxx (0.0.0.0)

- The terminal server doesn't have an IP address configured in the Terminal Server Configuration Wizard.
- If using DNS, check the terminal server's registration.
- If you are using a Citrix Published Application, you may need to specify the ICA browser.

C) Cannot Connect to Server xxx (w.x.y.z)

- Check the event viewer on the terminal server. If it says "Could not issue client license", you need a Microsoft Terminal Server Client Access License (MS TS CAL) and/or a Microsoft Terminal Server Licensing server.
- Check the Subnet Mask in the ACP Boot Loader on the thin client. If it is set to 255.255.255.255 instead of 255.255.255.0, it will fail to connect to the terminal server.



Reboot the thin client and use the spacebar when the "**Select any Key to Configure IP Settings**" is displayed. Change the subnet mask in the ACP Boot Loader menu.

D) Error 50 - Disconnected

- Check the event viewer on the terminal server. If it says "Could not issue client license", you need a MS TS Cal / MS TS Licensing server.

6) Attempts to connect to terminal server, but dies

- Some servers (Dell and its Dellwall.bmp, for example) load a complex bitmapped background that can interfere with loading. Find the offending wallpaper file on the console session and rename it so that it doesn't load at login

7) Connects to connect to terminal server, but cannot login

- Is the user a valid user? Is the password correct?
- Does the user have permission to connect through Terminal Services (user properties in the User Manager)
- If logging in to a Windows 2003 or 2008 terminal server, is the user a member of the Administrators group or Remote Desktop Users group?
- Check the event viewer. If it says "Could not issue client license", you need a Microsoft TS Cal and or a Microsoft TS Licensing server.
- When terminal server is in 2 domains and an administrator logs into the console with a domain account it sets that as the default domain. If the terminals are configured to use the other domain they will be unable to login. Login to the console with the domain of the terminals to reset the default domain.

8) Login to Terminal Server prompts for password even though the username and password are filled in ThinManager

- The password may be entered wrong in ThinManager.
- Windows 2000 Server is set to always prompt for password at login for RDP users. Select **Programs>Administrative Tools>Terminal Services Configuration** and double click on **RDP-tcp Properties** in the right-hand window. Uncheck the **Always Prompt for Password** checkbox on the **Login Settings** tab.

Thin Client is Running a Session on the Terminal Server

9) Disconnects randomly

- Make sure each user is logging on with a unique user name. Windows 2003/2008 will only allow one session per name by default.
- Check the physical network connection.
- Check for a different computer (e.g. a laptop) with the same IP address.
- Slow down the Monitoring Interval on the Monitoring Connection page of the Terminal Configuration Wizard by increasing the timeout and retry values.

10) The session in Windows 2003 requires frequent logins

- Turn off the Windows screen saver. User accounts in Windows 2003 use a secure screen saver by default that requires this frequent login.

11) Mouse works but the application is unresponsive

- Application on terminal server is locked up - kill the application and let the thin client reconnect to terminal server and restart the application



12) Sound doesn't work

- Make sure that you are using a Windows 2003 or 2008 terminal server
- Make sure that Audio Mapping is allowed on the Client Settings of the RDP-tcp Properties in the Terminal Server Configuration Console.
- Make sure that you are using a ThinManager Ready thin client that has sound capability
- Use the Sound Module for that specific thin client
- Connect a powered speaker to the "Line Out" plug. Line Out isn't amplified so it requires a powered speaker.
- Properly working sound will play a sound at boot and at login.

13) The touch screen doesn't work

- Make sure you are using the right Touch Screen Module for the touch screen controller.
- Make sure that the serial cable is plugged into the correct serial port
- Make sure that the Touch Screen Module is using the correct baud rate.
- Use the USB Touch Screen Module if the touch screen is USB, or set the *Connection Type* to USB on the regular touch screen module.

14) The touch screen mouse doesn't match the touches.

- Calibrate the touch screen by highlighting the unit in the ThinManager tree and select **Tools > Calibrate Touch Screen**.

15) Changes to the configuration in ThinManager don't show up on the thin client.

- Restart or Reboot the thin client. Changes are only sent to a thin client at bootup.

16) The configuration of the primary ThinManager Server and the secondary ThinManager Server are different.

- Enable automatic synchronization by selecting **Manage > ThinManager Server List** or manually synchronize the configurations by selecting **ThinManagerServer > Synchronize** in the ThinManager menu bar.

17) The terminals in the tree on the primary ThinManager Server show green while the terminals on the secondary are all red.

- Enable automatic synchronization by selecting **Manage > ThinManager Server List** or add both ThinManager Servers to the ThinManager Server Monitor List in the Terminal Configuration Wizard. Reboot the terminals and synchronize the ThinManagers as in Number 16.

18) The client is showing the time of the terminal server in a different time zone and not the local time.

- Use the Time Zone Redirection Module on the client with the local time zone selected.
- Make sure that the security policy of the terminal server or domain allows it. Look at **Computer Configuration > Administrative Templates > Windows Components > Terminal Services > Client/Server data redirection > Allow Time Zone Redirection** and set it to **Enabled**

19) When "Terminal Servers" is highlighted in the ThinManager tree, the Details pane doesn't show OK for the connections.

A) "No login information supplied"

- Run the Terminal Server List Wizard and add an administrative user name and password on the Terminal Server Name page of the Terminal Server List Wizard.

B) "User specified does not have permission to connect"

- This indicates that the Terminal Server had an invalid username and password added on the Terminal Server Name page of the Terminal Server List Wizard. Run the Terminal Server List Wizard and change to an administrative user name and password on the Terminal Server Name page of the Terminal Server List Wizard.



- Use the domain in the Domain field on the Terminal Server Name page of the Terminal Server List Wizard.
- If not in a domain, try using the terminal server name in the Domain field on the Terminal Server Name page of the Terminal Server List Wizard.

C) WTSAPI 32.dll connection failed

- This occurs when the terminal server is off or unreachable. Try pinging the terminal server.

20) The *Users*, *Sessions*, and *Processes* tabs don't show data for a terminal server

A) No login information supplied

- Run the Terminal Server List Wizard and add an administrative user name and password on the Terminal Server Name page of the Terminal Server List Wizard.

B) User specified does not have permission to connect

- This indicates that the Terminal Server had an invalid username and password added on the Terminal Server Name page of the Terminal Server List Wizard. Run the Terminal Server List Wizard and change to an administrative user name and password on the Terminal Server Name page of the Terminal Server List Wizard.
- Use the domain in the Domain field on the Terminal Server Name page of the Terminal Server List Wizard.
- If not in a domain, try using the terminal server name in the Domain field on the Terminal Server Name page of the Terminal Server List Wizard.

21) The *Users* and *Sessions* tabs show data for a terminal server, but the *Processes* tabs shows no data.

- Shorten the name of the terminal.
Microsoft truncates the terminal names to 15 characters. The Process information won't display for terminals with a name longer than 15 characters.

22) When shadowing a client the mouse doesn't work in the shadowed session.

- The user must be logged into the shadowing computer as an administrator, or as a ThinManager Administrator, or member of a security group that is given permission to use interactive shadowing in the ThinManager Server Configuration Wizard.
- The interactive shadow must be checked in **RemoteView** on the ThinManager menu.
- A terminal using the Share Keyboard and Mouse module will only be interactive if the mouse is active in that session.